FileInASnap MiniMax - AI-Powered File Management



A modern, AI-enhanced file management application inspired by SparkleShare, featuring intelligent document analysis, smart categorization, and automated organization powered by OpenRouter's free AI models.







Core File Management

- Smart Folders Intelligent file organization with AI-powered suggestions
- Real-time Sync Instant file updates and synchronization
- Multi-language Support Available in 6 languages (EN, ES, FR, DE, ZH, JA)
- SparkleShare-inspired UI Clean, modern interface with intuitive navigation

AI-Powered Capabilities

- Document Analysis Extract entities, categorize content, and identify document types
- Smart Tagging Automated tag generation based on content analysis
- In File Categorization Intelligent classification using content-aware AI models

- Image Analysis Computer vision with object detection and OCR capabilities
- Q Duplicate Detection Advanced similarity detection beyond simple checksums
- **Solution** Al-generated summaries for any file type
- Organization Suggestions Al-recommended folder structures and workflows
- **Fraction Monitoring** Live status of all AI system capabilities

TARCHITECTURE

Frontend (React + Vite + TypeScript)

- Framework: React 18 with TypeScript
- Build Tool: Vite for fast development and optimized builds
- Styling: TailwindCSS with custom SparkleShare-inspired theme
- UI Components: Custom component library with accessibility features
- Internationalization: Multi-language support with dynamic switching

Backend (Supabase + Edge Functions)

- Database: PostgreSQL with real-time subscriptions
- Authentication: Supabase Auth with social providers
- Storage: Secure file storage with access controls
- API: Serverless Edge Functions for AI integration

AI Integration (MCP Server)

- · Primary Provider: OpenRouter free tier models
- Fallback Ready: MiniMax integration scaffolded for future activation
- Models: Mistral-7B, Llama-3.1-8B, Qwen2-7B for text processing

• Architecture: Universal provider abstraction for easy switching



Prerequisites

- Node.js 18+
- npm or pnpm
- Supabase account
- OpenRouter API key (free tier available)

Installation

1. Clone the repository

```
bash git clone https://github.com/Greenmamba29/fileinasnap_minimax.git cd fileinasnap_minimax
```

2. Install dependencies

```
bash npm install # or pnpm install
```

3. Environment Setup

4. Start Development Server

```
bash npm run dev # or pnpm dev
```

5. Build for Production

bash npm run build # or pnpm build

MCP Server Setup

The AI capabilities are powered by a custom MCP (Model Context Protocol) server located in the ./mcp-server/ directory.

Local MCP Server Development

1. Navigate to MCP server directory

bash cd mcp-server

2. Install Python dependencies

bash pip install -r requirements.txt

3. Configure environment

bash export OPENROUTER_API_KEY="your_openrouter_api_key"

4. Run MCP server

bash python server.py

Available AI Tools

- analyze_document Document analysis with entity extraction
- categorize_files Batch file classification
- generate_file_tags Intelligent tagging system
- analyze_image Computer vision analysis
- detect_file_duplicates Advanced duplicate detection
- generate_file_summary Content summarization
- suggest_folder_structure Organization suggestions
- get_provider_status System health monitoring



SparkleShare Inspiration

- · Color Palette: Clean whites, soft grays, and accent blues
- Typography: Modern, readable fonts with proper hierarchy
- Icons: Custom icon set resembling SparkleShare's folder metaphors
- Layout: Grid-based design with intuitive navigation patterns

Al Integration Indicators

- Sparkle Icons Subtle indicators for AI-powered features
- Loading States Progress indicators for AI operations
- Result Displays Clean presentation of AI insights and suggestions

Nevelopment

Project Structure

```
fileinasnap_minimax/
├─ src/
                          # Frontend source code
   — components/
                         # React components
                       # Page components
   ├─ pages/
  ├─ hooks/
                        # Custom React hooks
   ├─ utils/
                        # Utility functions
   └─ styles/
                        # CSS and styling
                        # Static assets
  - public/
 — supabase/
                        # Supabase configuration
                      # Edge Functions
   ├─ functions/
   └─ migrations/
                        # Database migrations
  - mcp-server/
                        # AI MCP Server
   ─ src/
                        # Python source code
                       # Usage examples
   ├─ examples/
   └─ tests/
                        # Test suite
└─ locales/
                         # Internationalization files
```

Key Technologies

- Frontend: React, TypeScript, Vite, TailwindCSS
- Backend: Supabase, PostgreSQL, Edge Functions
- AI: OpenRouter APIs, MCP Protocol
- Deployment: Vercel/Netlify (Frontend), Supabase (Backend)

Deployment

The application is deployed using modern cloud platforms:

- Frontend: Automatically deployed from main branch

- Backend: Supabase Edge Functions for serverless scaling
- Al Services: OpenRouter free tier with MiniMax upgrade path

Contributing

We welcome contributions! Please see our contributing guidelines:

- 1. Fork the repository
- 2. Create a feature branch (git checkout -b feature/amazing-feature)
- Commit your changes (git commit -m 'Add amazing feature')
- 4. Push to the branch (git push origin feature/amazing-feature)
- 5. Open a Pull Request

📝 License

This project is licensed under the MIT License - see the LICENSE file for details.

Acknowledgments

- SparkleShare UI/UX design inspiration
- OpenRouter Free AI model access
- MiniMax Future AI capabilities integration
- Supabase Backend infrastructure
- **React Team** Amazing frontend framework

Support

• Issues: GitHub Issues

• Discussions: GitHub Discussions

• Email: support@fileinasnap.com

Built with **by** the FileInASnap team | Website | Documentation | API